

PROCEEDINGS OF THE CLUB

WEDNESDAY, APRIL 30, 1902

The meeting was held at the Botanical Garden at 3:30 P. M.; 27 persons present; Rev. L. H. Lighthipe in the chair.

There were four elections to active membership: Mr. Elmer C. Hazard, Shrewsbury, N. J.; Mr. Ewen McIntyre, 303 West 74th St., New York; Professor Henrietta E. Hooker, Mt. Holyoke College, South Hadley, Mass.; and Miss Fannie F. Rabonowich, 22 Attorney St., New York.

Dr. Britton spoke of Dr. Oliver Willis's recent death and the following committee was appointed to draw up resolutions: Dr. Britton, President Brown and Dr. Rusby.

The first paper by Dr. C. C. Curtis, was on "Some Features connected with Transpiration." Transpiration may be illustrated by a fluctuating curve. The maximum of the curve is found in the forenoon. Transpiration can hardly be considered to be wholly a physical property. The volume of water given off by plants in the night is very considerable, and probably the stomata are never completely closed. It seems perfectly rational that the stomata are open, partly, in the dark and that some transpiration takes place. During the early morning hours, the amount of water given off is much more than in the afternoon, when the stomata have become accustomed to the light.

The second paper announced was by Dr. H. H. Rusby, on "A new Genus of Violaceae, with Remarks on other Genera." This was deferred on account of absence of the author.

The third paper, by Dr. H. M. Richards, was on "Turgor Changes in injured Tissues." It has been shown that the curve of respiration in injured plant tissues rises for a time and then falls off to the normal. The "wound fever," or rise-in-temperature curve is similar to that of respiration. Turgor changes apparently accompany these reactions towards injury. The onion was used for experiment, and the wounded and uninjured bulbs were placed in a saturated atmosphere. The normal turgor pressure in terms of KNO_3 solution is about 3.5 to 4%; after wounding this falls about 0.5%. As the healing goes on,

four or five days after the wounding, the turgor has increased again and the wounded and unwounded onions are practically the same in this respect. Carrot, beet and radish were also used.

Dr. MacDougal showed plants of *Monotropsis odorata* sent by Professor Johnson, of Johns Hopkins University. He also showed a basket made by the Pima Indians of Arizona, of *Typha*, *Martynia* and *Salix*, and exhibited the *ayal* or calabash fruit from Sonora, of economic importance, of genus *Crescentia*.

Miss Angell, of Plainfield, New Jersey, exhibited living plants of *Viola Angellae* in flower. When the plant is flowering the scapes exceed the leaves, but later in the season the leaves over-top the scapes.

S. H. BURNHAM,

Secretary pro tem.

FOURTH OF JULY EXCURSION OF THE CLUB

The Fourth of July excursion of the Torrey Club promises to be one of exceeding interest and profit. The main excursion will be to the Jamesville "green lakes," which are among the few stations of the hart's-tongue fern in America. It is planned to leave by carryalls from the postoffice at Syracuse at nine o'clock on the Fourth making an all-day trip in conjunction with the Syracuse Botanical Club. It is planned to visit both the green lakes and one or two interesting glens in the neighborhood. The green lakes are small ponds in the bottom of amphitheater-like hollows two hundred feet or more deep and said by the geologists to be the heads of ancient waterfalls. The lakes are very deep, and filled with cold water more or less impregnated with sulphur. The surrounding rock is of the cor-niferous and Helderberg limestone which overlies the Salina (salt) formation. Probably as large a variety of ferns grows about these lakes as in any limited area anywhere in the country, and mosses, fungi, lichens, and flowering plants grow in great profusion. On Saturday the fifth of July the club will visit the saline vegetation on the shores of Onondaga Lake, leaving the city by trolley cars. It is hoped that later excursions will be possible at the Kirkville green lakes and possibly Sylvan Beach on Oneida Lake. It is desirable that all who intend going with

the excursion notify the leader, L. M. Underwood, at Columbia University, as early as possible in order that proper accommodations may be provided.

NEWS ITEMS

Dr. B. M. Duggar, of the Bureau of Plant Industry, U. S. Department of Agriculture, has been elected professor of botany in the University of Missouri.

Professor Francis E. Lloyd lectured before the Biological Club of Princeton University, May 15, on "The Behavior of the Pollen-Tube in Spermatophytes."

Professor F. S. Earle returned to New York on May 27 from a collecting trip of two months, mostly spent in the Davis Mountains of western Texas and the Sacramento Mountains of eastern New Mexico.

Dr. W. A. Cannon, recently fellow in botany in Columbia University, will spend the summer in western North Carolina. A part of his time will be devoted to making collections for the New York Botanical Garden.

The eleventh session of the Hopkins Seaside Laboratory at Pacific Grove, California, began on June 9, the regular course of instruction closing July 19. Dr. Anstruther A. Lawson, assistant in botany at the Leland Stanford Junior University, has charge of the botanical courses.

The May number of the *Bulletin of the Torrey Botanical Club* includes three papers of interest to students of the fungi, viz., "The Nidulariaceae of North America" by V. S. White, illustrated by five plates; "Concerning some West American Fungi" by David Griffiths; and the conclusion of "Supplementary Notes on the Erysiphaceae" by E. S. Salmon, F. L. S.

Mr. Cyrus G. Pringle, one of the best known of living botanical collectors, has accepted an appointment as keeper of the herbarium of the University of Vermont, where his personal herbarium is soon to be deposited. The same institution has recently acquired on deposit the herbarium of the late C. C. Frost, which is especially rich in the cryptogamous plants of the Connecticut Valley.